Diode-pumped laser amplifier

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Bibliographische Daten

In a diode-pumped laser amplifier the inventive object is to increase the tolerance of the amplifier arrangement relative to variations of the input parameters significantly, so that fine-tuning is no longer necessary for guaranteeing the stability of the amplifier. Into a laser-active solid-state medium where a thermal lens of a strength which is different in orthogonal planes is generated in consequence of the irradiated pump radiation, a laser beam to be amplified is directed into the laser-active solid-state medium while being focused in the plane with a strong thermal lens, wherein a beam waist that is being generated lies in the area of the thermal lens. The laser amplifier can be used for amplifying the radiation of an oscillator.